Spotbugs Raw Outputs:

Test 1:

```xml
<BugInstance type="ST_WRITE_TO_STATIC_FROM_INSTANCE_METHOD" priority="1" rank="15"
abbrev="ST" category="STYLE" first="1">
  <Class classname="learnsecurity.SimpleWebServer">
    <SourceLine classname="learnsecurity.SimpleWebServer"
sourcefile="SimpleWebServer.java" sourcepath="learnsecurity/SimpleWebServer.java"/>
  </Class>
  <Method classname="learnsecurity.SimpleWebServer" name="<init>" signature="()V"
isStatic="false">
    <SourceLine classname="learnsecurity.SimpleWebServer" start="16" end="18"
startBytecode="0" endBytecode="67" sourcefile="SimpleWebServer.java"
sourcepath="learnsecurity/SimpleWebServer.java"/>
  </Method>
  <Field classname="learnsecurity.SimpleWebServer" name="dServerSocket"
signature="Ljava/net/ServerSocket;" isStatic="true">
    <SourceLine classname="learnsecurity.SimpleWebServer"
sourcefile="SimpleWebServer.java" sourcepath="learnsecurity/SimpleWebServer.java"/>
  </Field>
  <SourceLine classname="learnsecurity.SimpleWebServer" start="17" end="17"
startBytecode="14" endBytecode="14" sourcefile="SimpleWebServer.java"
sourcepath="learnsecurity/SimpleWebServer.java"/>
  <SourceLine classname="learnsecurity.SimpleWebServer" start="17" end="17"
startBytecode="14" endBytecode="14" sourcefile="SimpleWebServer.java"
sourcepath="learnsecurity/SimpleWebServer.java"/>
</BugInstance>


<BugInstance type="NP_DEREFERENCE_OF_READLINE_VALUE" priority="2" rank="15"
abbrev="NP" category="STYLE" first="1">
  <Class classname="learnsecurity.SimpleWebServer">
    <SourceLine classname="learnsecurity.SimpleWebServer"
sourcefile="SimpleWebServer.java" sourcepath="learnsecurity/SimpleWebServer.java"/>
  </Class>
  <Method classname="learnsecurity.SimpleWebServer" name="processRequest"
signature="(Ljava/net/Socket;)V" isStatic="false">
    <SourceLine classname="learnsecurity.SimpleWebServer" start="36" end="71"
startBytecode="0" endBytecode="324" sourcefile="SimpleWebServer.java"
sourcepath="learnsecurity/SimpleWebServer.java"/>
  </Method>
  <LocalVariable name="request" register="4" pc="49" role="LOCAL_VARIABLE_VALUE_OF"/>
  <SourceLine classname="learnsecurity.SimpleWebServer" start="51" end="51"
startBytecode="51" endBytecode="51" sourcefile="SimpleWebServer.java"
sourcepath="learnsecurity/SimpleWebServer.java"/>
  <SourceLine classname="learnsecurity.SimpleWebServer" start="51" end="51"
startBytecode="51" endBytecode="51" sourcefile="SimpleWebServer.java"
sourcepath="learnsecurity/SimpleWebServer.java"/>
</BugInstance>
```

Test 2:

```xml
<BugCollection version="3.1.11" sequence="1" timestamp="1549534616826"
analysisTimestamp="1549534611079" release="">

  <Project projectName="Simpleweb">

    <Jar>C:\Users\shrey\eclipse-workspace\Simpleweb\bin</Jar>

    <AuxClasspathEntry>C:\Users\shrey\eclipse-
workspace\Simpleweb\bin</AuxClasspathEntry>

    <AuxClasspathEntry>C:\Program
Files\Java\jre1.8.0_181\lib\rt.jar</AuxClasspathEntry>

    <AuxClasspathEntry>C:\Program
Files\Java\jre1.8.0_181\lib\jce.jar</AuxClasspathEntry>

    <SrcDir>C:\Users\shrey\eclipse-workspace\Simpleweb\src</SrcDir>

  </Project>

  <BugInstance type="DM_DEFAULT_ENCODING" priority="1" rank="19" abbrev="Dm"
category="I18N" first="1">

    <Class classname="learnsecurity.SimpleWebServer">

      <SourceLine classname="learnsecurity.SimpleWebServer"
sourcefile="SimpleWebServer.java" sourcepath="learnsecurity/SimpleWebServer.java"/>

    </Class>

    <Method classname="learnsecurity.SimpleWebServer" name="processRequest"
signature="(Ljava/net/Socket;)V" isStatic="false">

      <SourceLine classname="learnsecurity.SimpleWebServer" start="36" end="71"
startBytecode="0" endBytecode="324" sourcefile="SimpleWebServer.java"
sourcepath="learnsecurity/SimpleWebServer.java"/>

    </Method>

    <Method classname="java.io.InputStreamReader" name="&lt;init&gt;"
signature="(Ljava/io/InputStream;)V" isStatic="false" role="METHOD_CALLED">

      <SourceLine classname="java.io.InputStreamReader"/>

    </Method>

    <SourceLine classname="learnsecurity.SimpleWebServer" start="37" end="37"
startBytecode="12" endBytecode="12" sourcefile="SimpleWebServer.java"
sourcepath="learnsecurity/SimpleWebServer.java"/>

    <SourceLine classname="learnsecurity.SimpleWebServer" start="37" end="37"
startBytecode="12" endBytecode="12" sourcefile="SimpleWebServer.java"
sourcepath="learnsecurity/SimpleWebServer.java"/>

  </BugInstance>

  <BugInstance type="DM_DEFAULT_ENCODING" priority="1" rank="19" abbrev="Dm"
category="I18N" first="1">
```

```xml
    <Class classname="learnsecurity.SimpleWebServer">

      <SourceLine classname="learnsecurity.SimpleWebServer"
sourcefile="SimpleWebServer.java" sourcepath="learnsecurity/SimpleWebServer.java"/>

    </Class>

    <Method classname="learnsecurity.SimpleWebServer" name="processRequest"
signature="(Ljava/net/Socket;)V" isStatic="false">

      <SourceLine classname="learnsecurity.SimpleWebServer" start="36" end="71"
startBytecode="0" endBytecode="324" sourcefile="SimpleWebServer.java"
sourcepath="learnsecurity/SimpleWebServer.java"/>

    </Method>

    <Method classname="java.io.OutputStreamWriter" name="&lt;init&gt;"
signature="(Ljava/io/OutputStream;)V" isStatic="false" role="METHOD_CALLED">

      <SourceLine classname="java.io.OutputStreamWriter"/>

    </Method>

    <SourceLine classname="learnsecurity.SimpleWebServer" start="41" end="41"
startBytecode="27" endBytecode="27" sourcefile="SimpleWebServer.java"
sourcepath="learnsecurity/SimpleWebServer.java"/>

    <SourceLine classname="learnsecurity.SimpleWebServer" start="41" end="41"
startBytecode="27" endBytecode="27" sourcefile="SimpleWebServer.java"
sourcepath="learnsecurity/SimpleWebServer.java"/>

  </BugInstance>

  <BugInstance type="DM_DEFAULT_ENCODING" priority="1" rank="19" abbrev="Dm"
category="I18N" first="1">

    <Class classname="learnsecurity.SimpleWebServer">

      <SourceLine classname="learnsecurity.SimpleWebServer"
sourcefile="SimpleWebServer.java" sourcepath="learnsecurity/SimpleWebServer.java"/>

    </Class>

    <Method classname="learnsecurity.SimpleWebServer" name="serveFile"
signature="(Ljava/io/OutputStreamWriter;Ljava/lang/String;)V" isStatic="false">

      <SourceLine classname="learnsecurity.SimpleWebServer" start="75" end="110"
startBytecode="0" endBytecode="320" sourcefile="SimpleWebServer.java"
sourcepath="learnsecurity/SimpleWebServer.java"/>

    </Method>

    <Method classname="java.io.FileReader" name="&lt;init&gt;"
signature="(Ljava/lang/String;)V" isStatic="false" role="METHOD_CALLED">

      <SourceLine classname="java.io.FileReader"/>

    </Method>
```

```
    <SourceLine classname="learnsecurity.SimpleWebServer" start="91" end="91"
startBytecode="47" endBytecode="47" sourcefile="SimpleWebServer.java"
sourcepath="learnsecurity/SimpleWebServer.java"/>

    <SourceLine classname="learnsecurity.SimpleWebServer" start="91" end="91"
startBytecode="47" endBytecode="47" sourcefile="SimpleWebServer.java"
sourcepath="learnsecurity/SimpleWebServer.java"/>

  </BugInstance>

  <BugInstance type="NP_DEREFERENCE_OF_READLINE_VALUE" priority="2" rank="15"
abbrev="NP" category="STYLE" first="1">

    <Class classname="learnsecurity.SimpleWebServer">

      <SourceLine classname="learnsecurity.SimpleWebServer"
sourcefile="SimpleWebServer.java" sourcepath="learnsecurity/SimpleWebServer.java"/>

    </Class>

    <Method classname="learnsecurity.SimpleWebServer" name="processRequest"
signature="(Ljava/net/Socket;)V" isStatic="false">

      <SourceLine classname="learnsecurity.SimpleWebServer" start="36" end="71"
startBytecode="0" endBytecode="324" sourcefile="SimpleWebServer.java"
sourcepath="learnsecurity/SimpleWebServer.java"/>

    </Method>

    <LocalVariable name="request" register="4" pc="49"
role="LOCAL_VARIABLE_VALUE_OF"/>

    <SourceLine classname="learnsecurity.SimpleWebServer" start="51" end="51"
startBytecode="51" endBytecode="51" sourcefile="SimpleWebServer.java"
sourcepath="learnsecurity/SimpleWebServer.java"/>

    <SourceLine classname="learnsecurity.SimpleWebServer" start="51" end="51"
startBytecode="51" endBytecode="51" sourcefile="SimpleWebServer.java"
sourcepath="learnsecurity/SimpleWebServer.java"/>

  </BugInstance>

  <BugInstance type="OBL_UNSATISFIED_OBLIGATION" priority="2" rank="20" abbrev="OBL"
category="EXPERIMENTAL" first="1">

    <Class classname="learnsecurity.SimpleWebServer">

      <SourceLine classname="learnsecurity.SimpleWebServer"
sourcefile="SimpleWebServer.java" sourcepath="learnsecurity/SimpleWebServer.java"/>

    </Class>

    <Method classname="learnsecurity.SimpleWebServer" name="serveFile"
signature="(Ljava/io/OutputStreamWriter;Ljava/lang/String;)V" isStatic="false">

      <SourceLine classname="learnsecurity.SimpleWebServer" start="75" end="110"
startBytecode="0" endBytecode="320" sourcefile="SimpleWebServer.java"
sourcepath="learnsecurity/SimpleWebServer.java"/>
```

```xml
    </Method>

    <Class classname="java.io.Reader" role="CLASS_REFTYPE">

      <SourceLine classname="java.io.Reader"/>

    </Class>

    <Int value="1" role="INT_OBLIGATIONS_REMAINING"/>

    <SourceLine classname="learnsecurity.SimpleWebServer" start="91" end="91"
startBytecode="47" endBytecode="47" sourcefile="SimpleWebServer.java"
sourcepath="learnsecurity/SimpleWebServer.java"
role="SOURCE_LINE_OBLIGATION_CREATED"/>

    <SourceLine classname="learnsecurity.SimpleWebServer" start="92" end="92"
startBytecode="51" endBytecode="51" sourcefile="SimpleWebServer.java"
sourcepath="learnsecurity/SimpleWebServer.java" role="SOURCE_LINE_PATH_CONTINUES"/>

    <SourceLine classname="learnsecurity.SimpleWebServer" start="93" end="93"
startBytecode="57" endBytecode="57" sourcefile="SimpleWebServer.java"
sourcepath="learnsecurity/SimpleWebServer.java" role="SOURCE_LINE_PATH_CONTINUES"/>

    <SourceLine classname="learnsecurity.SimpleWebServer" start="104" end="104"
startBytecode="69" endBytecode="69" sourcefile="SimpleWebServer.java"
sourcepath="learnsecurity/SimpleWebServer.java" role="SOURCE_LINE_PATH_CONTINUES"/>

    <SourceLine classname="learnsecurity.SimpleWebServer" start="105" end="105"
startBytecode="75" endBytecode="75" sourcefile="SimpleWebServer.java"
sourcepath="learnsecurity/SimpleWebServer.java" role="SOURCE_LINE_PATH_CONTINUES"/>

    <SourceLine classname="learnsecurity.SimpleWebServer" start="109" end="109"
startBytecode="99" endBytecode="99" sourcefile="SimpleWebServer.java"
sourcepath="learnsecurity/SimpleWebServer.java" role="SOURCE_LINE_PATH_CONTINUES"/>

    <SourceLine classname="learnsecurity.SimpleWebServer" start="110" end="110"
startBytecode="108" endBytecode="108" sourcefile="SimpleWebServer.java"
sourcepath="learnsecurity/SimpleWebServer.java" role="SOURCE_LINE_PATH_CONTINUES"/>

    <String value="{Reader x 1}" role="STRING_REMAINING_OBLIGATIONS"/>

  </BugInstance>

  <BugInstance type="OS_OPEN_STREAM" priority="2" rank="16" abbrev="OS"
category="BAD_PRACTICE" first="1">

    <Class classname="learnsecurity.SimpleWebServer">

      <SourceLine classname="learnsecurity.SimpleWebServer"
sourcefile="SimpleWebServer.java" sourcepath="learnsecurity/SimpleWebServer.java"/>

    </Class>

    <Method classname="learnsecurity.SimpleWebServer" name="serveFile"
signature="(Ljava/io/OutputStreamWriter;Ljava/lang/String;)V" isStatic="false">
```

```xml
        <SourceLine classname="learnsecurity.SimpleWebServer" start="75" end="110"
startBytecode="0" endBytecode="56" sourcefile="SimpleWebServer.java"
sourcepath="learnsecurity/SimpleWebServer.java"/>

    </Method>

    <Type descriptor="Ljava/io/Reader;" role="TYPE_CLOSEIT">

      <SourceLine classname="java.io.Reader"/>

    </Type>

    <SourceLine classname="learnsecurity.SimpleWebServer" start="91" end="91"
startBytecode="42" endBytecode="42" sourcefile="SimpleWebServer.java"
sourcepath="learnsecurity/SimpleWebServer.java"/>

    <SourceLine classname="learnsecurity.SimpleWebServer" start="91" end="91"
startBytecode="42" endBytecode="42" sourcefile="SimpleWebServer.java"
sourcepath="learnsecurity/SimpleWebServer.java"/>

  </BugInstance>

  <BugInstance type="REC_CATCH_EXCEPTION" priority="3" rank="20" abbrev="REC"
category="STYLE" first="1">

    <Class classname="learnsecurity.SimpleWebServer">

      <SourceLine classname="learnsecurity.SimpleWebServer"
sourcefile="SimpleWebServer.java" sourcepath="learnsecurity/SimpleWebServer.java"/>

    </Class>

    <Method classname="learnsecurity.SimpleWebServer" name="serveFile"
signature="(Ljava/io/OutputStreamWriter;Ljava/lang/String;)V" isStatic="false">

      <SourceLine classname="learnsecurity.SimpleWebServer" start="75" end="110"
startBytecode="0" endBytecode="320" sourcefile="SimpleWebServer.java"
sourcepath="learnsecurity/SimpleWebServer.java"/>

    </Method>

    <SourceLine classname="learnsecurity.SimpleWebServer" start="94" end="94"
startBytecode="60" endBytecode="60" sourcefile="SimpleWebServer.java"
sourcepath="learnsecurity/SimpleWebServer.java"/>

    <SourceLine classname="learnsecurity.SimpleWebServer" start="94" end="94"
startBytecode="60" endBytecode="60" sourcefile="SimpleWebServer.java"
sourcepath="learnsecurity/SimpleWebServer.java"/>

  </BugInstance>

  <BugInstance type="ST_WRITE_TO_STATIC_FROM_INSTANCE_METHOD" priority="1" rank="15"
abbrev="ST" category="STYLE" first="1">

    <Class classname="learnsecurity.SimpleWebServer">

      <SourceLine classname="learnsecurity.SimpleWebServer"
sourcefile="SimpleWebServer.java" sourcepath="learnsecurity/SimpleWebServer.java"/>
```

```
    </Class>

    <Method classname="learnsecurity.SimpleWebServer" name="&lt;init&gt;"
signature="()V" isStatic="false">

      <SourceLine classname="learnsecurity.SimpleWebServer" start="16" end="18"
startBytecode="0" endBytecode="67" sourcefile="SimpleWebServer.java"
sourcepath="learnsecurity/SimpleWebServer.java"/>

    </Method>

    <Field classname="learnsecurity.SimpleWebServer" name="dServerSocket"
signature="Ljava/net/ServerSocket;" isStatic="true">

      <SourceLine classname="learnsecurity.SimpleWebServer"
sourcefile="SimpleWebServer.java" sourcepath="learnsecurity/SimpleWebServer.java"/>

    </Field>

    <SourceLine classname="learnsecurity.SimpleWebServer" start="17" end="17"
startBytecode="14" endBytecode="14" sourcefile="SimpleWebServer.java"
sourcepath="learnsecurity/SimpleWebServer.java"/>

    <SourceLine classname="learnsecurity.SimpleWebServer" start="17" end="17"
startBytecode="14" endBytecode="14" sourcefile="SimpleWebServer.java"
sourcepath="learnsecurity/SimpleWebServer.java"/>

  </BugInstance>

  <Errors errors="0" missingClasses="0"></Errors>

  <FindBugsSummary timestamp="Thu, 7 Feb 2019 02:35:39 -0600" total_classes="1"
referenced_classes="22" total_bugs="8" total_size="54" num_packages="1"
java_version="1.8.0_181" vm_version="25.181-b13" cpu_seconds="41.27"
clock_seconds="289.80" peak_mbytes="668.37" alloc_mbytes="1024.00" gc_seconds="0.21"
priority_3="1" priority_2="3" priority_1="4">

    <PackageStats package="learnsecurity" total_bugs="8" total_types="1"
total_size="54" priority_3="1" priority_2="3" priority_1="4">

      <ClassStats class="learnsecurity.SimpleWebServer"
sourceFile="SimpleWebServer.java" interface="false" size="54" bugs="8" priority_3="1"
priority_2="3" priority_1="4"/>

    </PackageStats>

    <FindBugsProfile>

      <ClassProfile name="de.tobject.findbugs.builder.FindBugs2Eclipse"
totalMilliseconds="413" invocations="2" avgMicrosecondsPerInvocation="206937"
maxMicrosecondsPerInvocation="225346"
standardDeviationMicrosecondsPerInvocation="18414"/>

      <ClassProfile
name="edu.umd.cs.findbugs.classfile.engine.ClassInfoAnalysisEngine"
totalMilliseconds="260" invocations="349" avgMicrosecondsPerInvocation="747"
```

maxMicrosecondsPerInvocation="28117"
standardDeviationMicrosecondsPerInvocation="2563"/>

        <ClassProfile name="edu.umd.cs.findbugs.detect.FieldItemSummary"
totalMilliseconds="73" invocations="22" avgMicrosecondsPerInvocation="3360"
maxMicrosecondsPerInvocation="14908"
standardDeviationMicrosecondsPerInvocation="4075"/>

        <ClassProfile
name="edu.umd.cs.findbugs.classfile.engine.ClassDataAnalysisEngine"
totalMilliseconds="71" invocations="349" avgMicrosecondsPerInvocation="204"
maxMicrosecondsPerInvocation="25174"
standardDeviationMicrosecondsPerInvocation="1341"/>

        <ClassProfile
name="edu.umd.cs.findbugs.classfile.engine.bcel.UnconditionalValueDerefDataflowFactor
y" totalMilliseconds="64" invocations="5" avgMicrosecondsPerInvocation="12856"
maxMicrosecondsPerInvocation="53872"
standardDeviationMicrosecondsPerInvocation="20658"/>

        <ClassProfile name="edu.umd.cs.findbugs.classfile.engine.bcel.MethodGenFactory"
totalMilliseconds="51" invocations="5" avgMicrosecondsPerInvocation="10361"
maxMicrosecondsPerInvocation="49374"
standardDeviationMicrosecondsPerInvocation="19507"/>

        <ClassProfile name="edu.umd.cs.findbugs.OpcodeStack$JumpInfoFactory"
totalMilliseconds="47" invocations="78" avgMicrosecondsPerInvocation="602"
maxMicrosecondsPerInvocation="4301"
standardDeviationMicrosecondsPerInvocation="692"/>

        <ClassProfile name="edu.umd.cs.findbugs.detect.FindNoSideEffectMethods"
totalMilliseconds="46" invocations="22" avgMicrosecondsPerInvocation="2093"
maxMicrosecondsPerInvocation="8308"
standardDeviationMicrosecondsPerInvocation="2294"/>

        <ClassProfile
name="edu.umd.cs.findbugs.classfile.engine.bcel.JavaClassAnalysisEngine"
totalMilliseconds="32" invocations="42" avgMicrosecondsPerInvocation="784"
maxMicrosecondsPerInvocation="18608"
standardDeviationMicrosecondsPerInvocation="2876"/>

        <ClassProfile
name="edu.umd.cs.findbugs.classfile.engine.bcel.IsNullValueDataflowFactory"
totalMilliseconds="28" invocations="5" avgMicrosecondsPerInvocation="5799"
maxMicrosecondsPerInvocation="12636"
standardDeviationMicrosecondsPerInvocation="5146"/>

        <ClassProfile
name="edu.umd.cs.findbugs.detect.NoteDirectlyRelevantTypeQualifiers"
totalMilliseconds="28" invocations="22" avgMicrosecondsPerInvocation="1295"
maxMicrosecondsPerInvocation="5402"
standardDeviationMicrosecondsPerInvocation="1546"/>

        <ClassProfile
name="edu.umd.cs.findbugs.classfile.engine.bcel.ValueNumberDataflowFactory"

```
totalMilliseconds="27" invocations="5" avgMicrosecondsPerInvocation="5481"
maxMicrosecondsPerInvocation="17277"
standardDeviationMicrosecondsPerInvocation="6069"/>

        <ClassProfile
name="edu.umd.cs.findbugs.classfile.engine.bcel.TypeDataflowFactory"
totalMilliseconds="26" invocations="5" avgMicrosecondsPerInvocation="5301"
maxMicrosecondsPerInvocation="14512"
standardDeviationMicrosecondsPerInvocation="5185"/>

        <ClassProfile name="edu.umd.cs.findbugs.util.TopologicalSort"
totalMilliseconds="26" invocations="316" avgMicrosecondsPerInvocation="83"
maxMicrosecondsPerInvocation="1328"
standardDeviationMicrosecondsPerInvocation="162"/>

    </FindBugsProfile>

  </FindBugsSummary>

  <ClassFeatures></ClassFeatures>

  <History>

    <AppVersion sequence="0" timestamp="1549534616820" release="" codeSize="0"
numClasses="0"/>

  </History>

</BugCollection>
```

Test 3:

No bugs reported!!!

SonarLint Output:

```
Resource     Date   Description

SimpleWebServer.java     null  Move the array designator from the variable to
the type.

SimpleWebServer.java     null  Define and throw a dedicated exception instead
of using a generic one.

SimpleWebServer.java     null  Define and throw a dedicated exception instead
of using a generic one.

SimpleWebServer.java     8 hours ago Remove this assignment of
"dServerSocket".

SimpleWebServer.java     null  Replace the synchronized class "StringBuffer"
by an unsynchronized one such as "StringBuilder".

SimpleWebServer.java     null  Add an end condition to this loop.
```

SimpleWebServer.java   null Use try-with-resources or close this "FileReader" in a "finally" clause.